

PROJECT TITLE : NITRATE-REDUCTION BY CONTROLLED  
FERMENTATION  
PERIOD COVERED : NOVEMBER 17 - DECEMBER 23, 1981  
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#### LEAR TRIAL 13

LEAR trial 13 was run from November 26 to December 18, 1981. The 750-1 fermenter was inoculated with a shaken flask culture. This was done in order to prevent any contamination produced in the 20-1 inoculum fermenter. Thus, the batch lasted 19 hours (instead of 10).

The closed-loop denitration was run for 10 days before any contamination was noted. The same time as contamination was detected in the fermenter, contamination was also noticed in the extract entering the fermenter. The contamination could be almost eliminated by a two-day run at  $D = 0.3 \text{ hr}^{-1}$  and at pH 4 in the open system (without extract recycling).

#### STERILITY TEST OF THE 750-1 FERMENTER

A sterility test was carried out in the 750-1 fermenter. After 36 hours at  $37^\circ\text{C}$  a considerable infection was noticed. The sterility test will be repeated after extensive revision of the fermenter by Chemap personnel.

*Schulthess*

DIS/jig/JANUARY 5, 1982

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